N° 10 –

#2

Cholera

Dr Coxe

W Smith

passed March 7th 1817

To be acquainted with the functions of the abdominal viscera and thereby be able to comprehend the pathology or diseased state of those parts, it is of the first importance to attend to their connections with each other. The liver, stomach and intestines form the extremities of one complete system of vessels, viz: the vena portarum.— The vena portarum may be correctly described as a tree, which shoots its roots widely among the viscera of the abdomen, and extends its branches into the substance of the liver. The bile which is the peculiar secretion of the liver being collected from the extreme branches of the hepatic system by the branches of the ductus hepaticus, flows into the intestines, and as it is their peculiar stimulus, it holds a sway over their actions according to the quantity and quality discharged into them. The intestines being excited, have a reciprocal influence upon the glandular viscera, and particularly upon the liver; because on the excitement of the intestines depends the velocity of the circulation through them; and the returning blood of the intestines is sent back, not into the heart, but through the vena portarum into the liver; and thus in an obvious manner are these viscera connected viz: The intestines with the liver by the biliary secretions, and the liver with the intestines and stomach through the medium of the circulation

circulation of the blood in the vena portarum. —

Cholera is derived from χολη, bile, and ρεω, to flow. Celius Aurelianus says the name is derived from χολη, bile, and ροη, a flux. Dr Cullen places it in the class Neuroses, and order Spasmi. he might with more propriety have placed it in the order Profluvia. The Doctor has two species, 1st Cholera Spontanea which happens in hot seasons and without any manifest cause. 2. Cholera Accidentalis which occurs after the use of food that digesteth slowly, and becomes too acrid. —
A copious discharge of bilious matter upwards and downwards with spasm, constitutes this disease. It is marked by great gastric distress, pain, and tenderness of the abdomen, flatulency, and distention, acute griping pains, quickly succeeded by a violent vomiting and purging, concurring together, or frequently alternating with one another, with spasms particularly of the lower extremities; there is a considerable degree of thirst, hurried respiration, the pulse is at first quick and feeble, but afterwards becomes stronger.

Causes.

This disease is to be met with in warm climates at all seasons of the year. In temperate climates it prevails most gene

generally in the months of August and September, so as to be considered in some countries as an autumnal Epidemic. It occasionally, however, prevail in every climate and every season. Marsh miasmata may be placed at the head of the causes which predispose to the disease; it is therefore closely analogous to Intermittent Fever, Bilious colic &c. It frequently takes place to all appearance spontaneously and independent of any exciting cause being applied; at other times it is evidently connected with sudden vicissitudes of temperature, giving rise to obstructed perspiration; It also arises from intemperance in eating and drinking; From taking in food difficult of digestion and which has passed readily into the acetous fermentation; Acrid ingesta. But these causes ~~frequently~~ probably do not often give rise to it without a predisposition acquired by preceding great heat, and the violence of the disease has been usually observed to be proportionate to the intensity of the heat; It is also observed to be peculiarly violent during the prevalence of an Epidemic. In St Mary's County (Maryland) there is no disease of so frequent occur-

occurrence as Cholera Morbus; this country is low, nearly insulated and intersected with muddy creeks and marshes; a large majority of the inhabitants are Roman Catholics who in compliance with their religious tenets, abstain from flesh two days in the week, and on those days it is customary with them to feast upon fish, particularly crabs during the autumnal months, which together with a predisposition acquired by miasmatic exhalations, proves not unfrequently the cause of fatal Cholera.—

Authors have generally coincided in placing Cholera under the head of those diseases which depend on the copious secretion of bile. But they have evidently mistaken the effect for the cause —a mere symptom for the original disease— for there is nothing more obvious to every one, than that it is as completely a gastric affection as any in the whole catalogue of diseases. Whatever may be the cause, it acts primarily on the stomach, which being intimately connected with the liver that organ receives the impression, and a preternaturally increased secretion of bile is the consequence; this fluid being

[illegible]

the contrary highly irritating, that its acrimony is less than even in health; or if the same quantity of water [illegible] strictly [illegible] the bile was thrown into the intestine there were little done; but that we should have a train of much more distressing symptoms to encounter. Dr. Harrington of Havre-de-Grace informs me that he had a patient labouring under a severe attack of cholera who when vomiting observed that the bile had a sweet taste; this induced Dr. Harrington to taste it himself and he found the bile to be very sweet without bitterness or any other disagreeable taste. Having had several attacks of this disease I have myself remarked this want of bitterness in the bile but have never observed the sweet taste.

Cholera morbus occurs with [illegible] of [illegible] nausea. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] The symptoms which have been already enumerated [illegible] its continuing for a short time gradually [illegible] can be seen in a debilitated [illegible]

[illegible] disease, [illegible] with much [illegible] have a good [illegible] & [illegible] with cold clammy sweats, considerable anxiety, a hurried and short respiration [illegible] in the legs coldness of the extremities and [illegible] with a sinking and intermitting pulse, which [illegible] terminate in death [illegible] that not unfrequently [illegible] [illegible] and [illegible] them in a much [illegible] [illegible] time. I have a case where [illegible] attack in this [illegible] [illegible] brought on by eating [illegible] and [illegible] [illegible] a [illegible] [illegible]. It [illegible] [illegible] [illegible] [illegible] [illegible] between the hours of [illegible] and [illegible], which was [illegible] by [illegible] [illegible] [illegible].

Treatment

There are many cases [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] to calm the irritation of the stomach to answer the purpose we may give an [illegible] or a small glass or two of [illegible] [illegible].

mineral-water . . . effervescing draught. —
The most ancient as also the most common practice
is to dilute the contents of the stomach by copious
drinks of chamomile tea, chicken water, barley water
&c. &c. Dr Sydenham just & much consideration and
experience have taught me that to endeavour on
the one hand to expel the acrid humours which
feed this disease by purgatives would be little at
variance to extinguish fire with oil, as the most ex-
ient cathartic would increase the disturbance —
and raise new tumults. And on the other hand,
to check the first effort of the humour in the
bowels beginning by opiate and other astrin-
gents, whilst it prevented the natural evacuation
and forcibly detained the humours within the
body would doubtless destroy the intestine
commotion the cause being rather in the bowels.
These reasons lead me therefore to pursue the mid-
dle path viz. partly to evacuate and partly to dil-
ute the humour." This is not the only instance on
the records of medicine of bad practice from

from apparently plausible theories. Professor Chapman in his lecture on this disease observes that as he saw no good reason for the common practice, he is in the habit of at once employing the disease in the administration of an emetic, (ipecac or Ipecacuanha) and promoting its action by the ordinary drinks. This practice is to me entirely new, and so far as I know originates with the excellent Professor. But though I have never seen its effects in this disease, I have no the least doubt of its decide[illegible] advantages over the other recommended. It causes the system to react and prevents to us an open form of disease.

Blood letting forms or ought the most important part in the treatment of this disease. It is to be regulated by the existing state of the system. The pulse here as in almost all the species of Intestinal disease is a very fallacious guide and one not at all to be trusted. In the commencement if the pulse is full we may bleed in small quantities; we must always in these cases gently solicit, and not unnecessarily alarm a reaction, the powers of the system are [illegible]. In

[illegible] attended with fever
[illegible] a [illegible] [illegible] for [illegible]
[illegible] of disease we are then to
[illegible] as was begun stated exhausted at first in
the system we are in a condition to resist and is
[illegible] [illegible] or [illegible]; ~~[illegible]~~
~~[illegible]~~ under these circumstances we shall
[illegible] the greatest adversaries promise the warm —
[illegible] — [illegible] rouse the system and [illegible] — allays
the irritability of the stomach invites the dis —
ease from the internal to the external surface —
and leaves the way for the administration of more
efficacious remedies.

Our remedies must now be such as are calculated to
calm the irritation of the system more effectually
and to put an entire stop to the reactions and
[illegible] for we will have a great variety of
medicines which answer this end. It will be
needless for me to enumerate every medicine
that has been used at the season; I shall there
fore confine myself to those only which at near

[illegible] as to [illegible] Narcotics —

Opium is generally the most remedy mentioned by writers who have treated of this disease. It is in common with the recommendation of Dr Lime it is taken retained in the stomach a sufficient length of time to produce any good effect when it the stomach is very irritable. The pill is less apt to be rejected than the liquid form; in the form of an enema it stands pre-eminent; an ounce of laudanum will often in a very short space of time remove all the urgent symptoms and transfer the patient from a state of torture to an easy calm. Enemata of this kind should therefore be administered from time to time pro renata. The effervescent draught is often found an excellent remedy in uremia. Sometimes it is made by taking Pure Carbonate of Potash and dissolve it in a small quantity of water and then add enough lime or lemon juice to effervesce. The patient may either take it in the form of effervescence or he may first take the alkali and then the acid and let the effervescence go on in the stomach. The Soda and Seltzer water

[illegible]

was [illegible] to ensure [illegible] recommended the [illegible] a [illegible] of [illegible] from the [illegible] Lemon [illegible] whom he had been a pupil the remedy succeeded entirely to their wishes and the distinguished patient was in a short time enabled to commence the [illegible] which awaited him. The son of the late secretary of the treasury United States was taken with an autumnal fever the bilious vomiting was the most distressing symptom of the fever and notwithstanding all the customary remedies were vigorously prescribed by the physician in attendance, Dr Chapman it nevertheless nearly proved fatal when Dr [illegible] was called into consultation [illegible] immediately recurred to the [illegible] the [illegible] was [illegible] and the patient quiet [illegible] the [illegible]. The [illegible] was also employed for this [illegible] and [illegible] with the [illegible]. In the mean time external applications were not without their use [illegible] with [illegible] the [illegible] extremities. The efficacy of this

the remedy appears to be increased, by mixing with the liquor used, some tincture of cloves, or oil of mint, &c. Pulverized pepper, ginger, or other spices formed into a plaster by means of soap and moistened with spirits, may be applied to the same parts. — All these remedies failing, as a last resort, Blisters may be advantageously had recourse to; a large one may be applied to the region of the stomach. I say a large one, inasmuch as it is much more efficacious than a small one, it gives no more pain, and is equally ready in healing again. Should there be great disposition to sink, blisters or sinapisms applied to the extremities are indispensible.

The debility consequent to this disease greatly favours its disposition to a relapse from slight causes. We must therefore, strictly enjoin our patient studiously to avoid all the exciting causes of the complaint — as all undue exercise — paroxysms of passions — intemperance in eating and drinking — he is carefully to abstain from every thing that is not easy of digestion, and use such as are light and nutritive. For this purpose a drink consisting of mucilage of

of Gum Arabic and lime water is peculiarly adapted, it will remain on the stomach when every thing else will be rejected. He must also observe a due regard to temperature by warm clothing; flannel next to the skin & cold feet are to be particularly guarded against — and above all, great attention must be paid to the bowels, keep them in a soluble state — and to restore their tone administer the bitter tonics. The happiest consequences will result from wearing a flannel roller around the abdomen; it ought to be applied so as to extend from the hips to the axilla.